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950	Title 2007 Fall Wild Turkey Harvest Results	2/1/2008

Abstract: *Hunters harvested 585 wild turkeys in 57 of the 74 counties open to hunting during the second modern day fall wild turkey hunting season. The 2007 fall harvest was 9.4 less than the 646 birds taken during the 2006 fall turkey season, and 18.3% less than the 716 birds taken during the first fall season in 2005. The 16 day archery-only season accounted for 26% of the harvest with 74% of the harvest occurring the last 5 days of the combined shotgun and archery season. Weekends accounted for 46% of the total harvest with 36% during one weekend of the combined archery and shotgun portions. Juvenile birds made up 27% of the harvest while adults composed 63% for a juvenile to adult ratio of 1:3. The high adult proportion was probably related to a combination of hunter selectivity, below average brood production in 2007, and the high production in 2004. Counties harvesting at least 25 birds ($\geq 4\%$ of harvest total) were Warrick, Clark, Switzerland, Harrison, Pike, and Jackson counties. The conservative harvest structure of Indiana's fall turkey season, declining hunter interest, below normal production, and above normal temperatures all contributed to the lower fall harvest.*

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The 3rd modern day fall wild turkey hunting season in Indiana was held from October 1-21, 2007. The archery-only portion of the season occurred from October 1-16 in 74 counties. The combined shotgun and archery portion occurred from October 17-21. Shotgun hunting was limited to 26 counties in the south-central and southeast regions of the state. Hunters harvested a total of 585 birds during the entire season with 150 (26%) taken during the archery-only portion and 435 (74%) taken during the combined shotgun and archery portion (Table 1). The 2007 fall harvest was 9.4% less than the 646 birds taken during the 2006 fall turkey season, and 18.3% less than the 716 birds taken during the first fall season in 2005. Across both portions of the 2007 fall turkey season, archers harvested 216 birds (37%) while shotgun hunters took 369 birds (63%). Weekends accounted for 46% of the harvest with 10% during weekends of the archery-only portion and 36% on the one weekend of the combined shotgun and archery portion (Table 2; Figure 1).

Comprehensive lifetime license holders harvested 49% of the birds followed by resident fall turkey license holders (22%) with 9% of the harvest by license exempt landowners and active military on leave (Table 3). The number of resident fall turkey licenses dropped by 125 permits (-7%) while youth licenses increased by 727 (+3%) and nonresident fall turkey licenses decreased from 30 to 8 permits sold. The numbers of resident and nonresident fall turkey licenses have progressively dropped since the first fall season in 2005. Interest in fall turkey hunting by landowners/active military has also apparently dropped based on declining harvests by these permit holders. The youth license increase probably reflects interest in the relatively new youth deer firearms season in late September initiated in 2006.

The determination of the sex and age of harvested wild turkeys was done by hunters and check station operators using a combination of spur and fall plumage characteristics (wing and breast feathers) as depicted in illustrations provided in the "2007-2008 Indiana Hunting and Trapping Guide". Juvenile birds made up 27% of the harvest while adults composed 63% for a juvenile to adult ratio of 1:3 (Table 4). Adult hens composed the largest proportion (42%) of the harvest. Based on observations in other states, a high

proportion of adults in the fall harvest, especially adult hens, generally occurs following poor summer brood production. Brood production in Indiana during the summer of 2007 was below average, however, the 2004 brood production was the highest ever recorded, leading to a high proportion of adults in the wild turkey population than would be normally expected. Based on the fall harvest experience and research in other states, adult males (AM) are generally the least vulnerable to fall harvest than the other sex/age cohorts. Hunter selection for larger birds when given the opportunity, also contributes to the high proportion of adults and adult males in the Indiana fall harvests. Finally, the interpretation of the fall sex and age criteria by hunters and check station operators is an undetermined factor related to errors in sex and age determination. Accurate sex and age determinations of fall turkeys are a common problem, even in states with more fall turkey hunting experience.

Counties harvesting at least 25 birds ($\geq 4\%$ of the total harvest) were Warrick, Clark, Switzerland, Harrison, Pike, and Jackson counties (Table 5; Figure 2). Sixteen counties open to archery only hunting did not harvest a single bird. The proportion of the fall to spring harvest by county ranged from 0% to 18% and the statewide fall to spring harvest proportion was 5.2%. The conservative harvest structure of Indiana's fall turkey season, declining hunter interest, below normal production, and above normal temperatures all contributed to the lower fall harvest.

An estimate of hunter effort and success can not be determined from check station reports but a rough assessment will be made through the 2007 spring turkey hunter questionnaire where a sample of 2007 spring hunters were queried about their participation in the 2006 fall turkey season. A summary assessment of the first 3 fall turkey seasons is currently underway.

Table 1. Fall wild turkey harvest by season and equipment used - Indiana, 2007.

Season	Archery Only		Both Shotgun & Archery		Equipment Totals	
Dates	1-16 October 2007		17-21 October 2007			
	No.	%	No.	%	No.	%
Bow	143	95%	63	14%	206	35%
X-Bow	7	5%	3	1%	10	2%
Shotgun	---	---	366	63%	366	63%
Muzzleloader SG	---	---	3	1%	3	1%
<i>Season Totals^a</i>	150	26%	435	74%	585	100%

^a Represents proportion of total harvest (585) taken during the archery-only or the combined shotgun and archery portions of the fall season.

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Table 2. Fall wild turkey harvest by day of the 2007 season, Indiana.

Date	Day	No. Harvested	Percent of Total	Cummulative Totals ^a	Cummulative Percent
<i>Archery Only</i>					
10/1/2006	Mon	15	2.6%	15	2.6%
10/2/2006	Tue	12	2.1%	27	4.6%
10/3/2006	Wed	6	1.0%	33	5.6%
10/4/2006	Thur	6	1.0%	39	6.7%
10/5/2006	Fri	4	0.7%	43	7.4%
10/6/2006	Sat	13	2.2%	56	9.6%
10/7/2006	Sun	9	1.5%	65	11.1%
10/8/2006	Mon	3	0.5%	68	11.6%
10/9/2006	Tue	6	1.0%	74	12.6%
10/10/2006	Wed	3	0.5%	77	13.2%
10/11/2006	Thur	6	1.0%	83	14.2%
10/12/2006	Fri	11	1.9%	94	16.1%
10/13/2006	Sat	22	3.8%	116	19.8%
10/14/2006	Sun	17	2.9%	133	22.7%
10/15/2006	Mon	9	1.5%	142	24.3%
10/16/2006	Tue	10	1.7%	152	26.0%
<i>Both Archery and Shotgun</i>					
10/17/2006	Wed	81	13.8%	81	13.8%
10/18/2006	Thur	68	11.6%	149	25.5%
10/19/2007	Fri	73	12.5%	222	37.9%
10/20/2006	Sat	90	15.4%	312	53.3%
10/21/2006	Sun	121	20.7%	433	74.0%
Total		585			100.0%

^a Cummulative totals listed by respective by archery-only and the combined shotgun-archery portions of the fall turkey season.

Fig. 1. Fall Turkey Harvest 2007

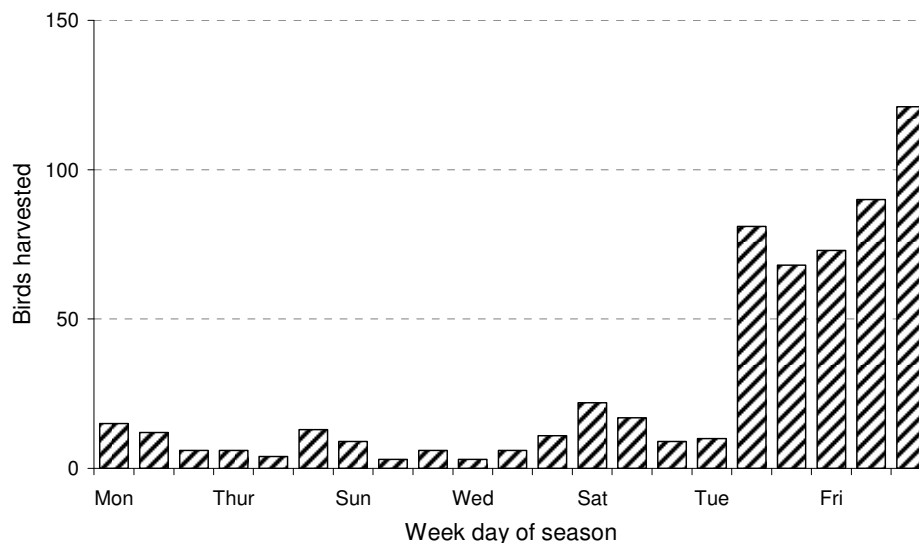


Table 3. Fall wild turkey harvest by permit type - Indiana, 2007.

Type of Permit	No.	%	No. Licenses Sold by Season End Date	Differences in from Prior Year (%)
Resident Fall Turkey	123	22%	1,557	-125 (-7%)
Non-Resident Fall Turkey	3	1%	8	-22 (-73%)
Comprehensive Lifetime	352	49%	43,028 ^a	----- ^a
Comprehensive Youth	41	7%	23,674	+727 (+3%)
Landowner/active military	53	9%	Unknown & Exempt	-12 (-19%)
Total ^b	572			

^a Comprehensive lifetime hunt and hunt & fish license as of July 2005 when the lifetime licenses discontinued. Value represents the number of lifetime license holders who could potentially hunt.

^b Missing values for permit type = 13; actual total harvest = 585.

Table 4. Age and sex structure of the fall wild turkey harvest - Indiana, 2007.

	Juvenile ^a		Adult ^b		Total ^c	
	No.	% ^c	No.	% ^c	No.	% ^c
Male	102	18.0%	176	31.1%	278	49.1%
Female	49	8.7%	239	42.2%	288	50.9%
Total ^c	151	26.7%	415	73.3%	566	
Juvenile : Adult					1 : 3	

^a Juvenile were birds estimated to be < 6 months old.

^b Adults were birds estimated to be ≥ 14 months old.

^c Percents are based on 566 birds; sex/age not recorded for 19 birds of 585 total harvest.

Table 5. Fall and spring wild turkey harvests in Indiana, 2007. ^a

County	Type of Fall Season ^b	2007 Fall Harvest	Percent of Fall Harvest	2007 Spring Harvest	Percent of Fall / Spring
Adams	Not Open	---	---	2	---
Allen	Not Open	---	---	14	---
Bartholomew	Archery	2	0.3%	88	2.3%
Benton	Archery	0	0.0%	5	0.0%
Blackford	Not Open	---	---	3	---
Boone	Not Open	---	---	3	---
Brown	Both	17	2.9%	187	9.1%
Carroll	Archery	0	0.0%	5	---
Cass	Archery	0	0.0%	30	0.0%
Clark	Both	29	5.0%	309	9.4%
Clay	Archery	4	0.7%	107	3.7%
Clinton	Not Open	---	---	0	---
Crawford	Both	10	1.7%	264	3.8%
Daviess	Archery	3	0.5%	107	2.8%
Dearborn	Both	23	3.9%	391	5.9%
Decatur	Archery	0	0.0%	48	0.0%
DeKalb	Archery	6	1.0%	75	8.0%
Delaware	Not Open	---	---	1	---
Dubois	Both	17	2.9%	205	8.3%
Elkhart	Archery	0	0.0%	40	0.0%
Fayette	Archery	1	0.2%	40	2.5%
Floyd	Both	10	1.7%	69	14.5%
Fountain	Archery	6	1.0%	144	4.2%
Franklin	Both	22	3.8%	285	7.7%
Fulton	Archery	2	0.3%	58	3.4%
Gibson	Archery	1	0.2%	114	0.9%
Grant	Archery ^c	0	0.0%	4	0.0%
Greene	Both ^c	14	2.4%	354	4.0%
Hamilton	Not Open	---	---	1	---
Hancock	Not Open	---	---	0	---
Harrison	Both	28	4.8%	402	7.0%
Hendricks	Not Open	---	---	7	---
Henry	Not Open	---	---	Not Open	---
Howard	Archery	0	0.0%	11	0.0%
Huntington	Archery ^c	3	0.5%	17	17.6%
Jackson	Both	25	4.3%	224	11.2%
Jasper	Archery ^c	2	0.3%	68	2.9%
Jay	Not Open	---	---	6	---
Jefferson	Both	20	3.4%	399	5.0%
Jennings	Both	12	2.1%	255	4.7%
Johnson	Archery	0	0.0%	46	0.0%
Knox	Archery	2	0.3%	80	2.5%
Kosciusko	Archery	2	0.3%	45	4.4%
Lagrange	Archery	2	0.3%	101	2.0%
Lake	Archery	0	0.0%	9	0.0%
LaPorte	Archery	4	0.7%	173	2.3%
Lawrence	Both	14	2.4%	279	5.0%
Madison	Not Open	---	---	0	---

Table 5 con't on next page.

Table 5. Fall and spring wild turkey harvests in Indiana, 2007. ^a

County	Type of Fall Season ^b	2007 Fall Harvest	Percent of Fall Harvest	2007 Spring Harvest	Percent of Fall / Spring
Marion	Not Open	---	---	0	---
Marshall	Archery	4	0.7%	222	1.8%
Martin	Both	11	1.9%	221	5.0%
Miami	Archery	1	0.2%	13	7.7%
Monroe	Both	19	3.2%	197	9.6%
Montgomery	Archery	1	0.2%	67	1.5%
Morgan	Archery	0	0.0%	63	0.0%
Newton	Archery ^c	3	0.5%	72	4.2%
Noble	Archery	1	0.2%	26	3.8%
Ohio	Both	4	0.7%	155	2.6%
Orange	Both	21	3.6%	275	7.6%
Owen	Both	15	2.6%	246	6.1%
Parke	Archery	6	1.0%	333	1.8%
Perry	Both	16	2.7%	349	4.6%
Pike	Both	28	4.8%	306	9.2%
Porter	Archery	0	0.0%	11	0.0%
Posey	Archery	1	0.2%	99	1.0%
Pulaski	Archery	2	0.3%	87	2.3%
Putnam	Archery	4	0.7%	149	2.7%
Randolph	Not Open	---	---	3	---
Ripley	Both	19	3.2%	219	8.7%
Rush	Not Open	---	---	1	---
St. Joseph	Archery	3	0.5%	114	2.6%
Scott	Both	17	2.9%	166	10.2%
Shelby	Not Open	---	---	5	---
Spencer	Both	17	2.9%	277	6.1%
Starke	Archery	3	0.5%	236	1.3%
Steuben	Archery	10	1.7%	234	4.3%
Sullivan	Archery	7	1.2%	242	2.9%
Switzerland	Both	29	5.0%	467	6.2%
Tippecanoe	Archery	2	0.3%	34	5.9%
Tipton	Not Open	---	---	0	---
Union	Archery	0	0.0%	62	0.0%
Vanderburg	Archery	3	0.5%	19	15.8%
Vermillion	Archery	0	0.0%	124	0.0%
Vigo	Archery	8	1.4%	189	4.2%
Wabash	Archery	0	0.0%	63	0.0%
Warren	Archery	1	0.2%	115	0.9%
Warrick	Both	32	5.5%	293	10.9%
Washington	Both	16	2.7%	255	6.3%
Wayne	Archery	0	0.0%	35	0.0%
Wells	Not Open	---	---	4	---
White	Archery	0	0.0%	34	0.0%
Whitley	Not Open	---	---	6	---
Totals		585	100.0%	11,163	5.2%

^a Harvest totals from check station reports.^b Archery = archery only. Both = archery and firearms.^c Only part of county open; e.g., western Greene County archery only, eastern Greene both archery and firearms; or Newton half open to archery only.

Figure 2.

2007 Fall Turkey Harvest

